

## ABOUT HEPATITIS C DIAGNOSED IN THE HOSPITAL STAFF OF CHU TLEMCCEN

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### ABSTRACT

The present work is to report a detailed description of the viral hepatitis C cases diagnosed between 1999-2011 CHU Tlemcen hospital staff.

This work describes the aspects clinical, biological, radiological, therapeutic and changing of these cases.

The circumstances of discovery have been systematic screening for **HCV** antibodies for most cases and monitoring **HIV** post **AES** for other cases.

This study confirms yet again the importance of routine screening of antibodies to **HCV** among hospital staff, the implementation of appropriate prevention road and the need for a therapeutic support of diagnosed cases.

**KEYWORDS:** Hepatitis B, Monitoring, HIV, HCV, AES, Tlemcen, CHU

### INTRODUCTION

The virus of hepatitis, such as hepatitis B is transmitted primarily by blood. Therefore, it feared that the personnel in contact with patients is frequently infected with this virus [2]. In the United States, a study showed an incidence of hepatitis C among medical and paramedical staff 3 times greater than that of a controlled population (21 cases per 100,000 persons per year) [1].

In summary, the areas where hospitals welcome patients who have a high prevalence, hospital staff seems to have a slightly increased risk of contracting Hepatitis C [1].

If the risk of transmission of the virus of hepatitis C, in case of accident of exposure to blood, is low (a little less), it is undeniable and justify the establishment of a procedure for screening and monitoring [4].

### METHODOLOGY

#### Objective

Describe cases of hepatitis viral diagnostic C, among the hospital staff of CHU Tlemcen, between 1999-2011

#### Methods

A detailed description (clinical, biological, radiological, therapeutic and evolutive) of cases of viral hepatitis C

#### Results

Quinze (16) viral hepatitis C cases have been diagnosed since 1999 (antibody Anti-HCV positive); the samples were sent to the Pasteur Institute for confirmation: 12 confirmed cases and four cases negative income (table 1)

Declared and monitored at the level of the service of Medicine of the work of CHU Tlemcen

**Table 1: Identification of Agents with Hepatitis C**

N°	Age	Sick	Sexe	Service	Profession	Discovery
1	49	Cas N°01	M	Stomatology	Nurse	1999
2	27	Cas N°02	F	UMC	Nurse	2000
3	43	Cas N°03	M	Hemodialysis	H.K	2000
4	46	Cas N°04	F	Maternity	H.K	2004
5	35	Cas N°05	F	Resuscitation	H.K	2004
6	44	Cas N°06	F	Emergencies	H.K	2005
7	40	Cas N°07	F	Radiology	Nurse	2007
8	52	Cas N°08	F	Maternity	Resident doctor	2007
9	49	Cas N°09	F	Maternity	H.K	2008
10	42	Cas N°10	M	ATCDS Incineration	Race officer	2008
11	34	Cas N°11	M	Oncology	H.K	2009
12	56	Cas N°12	F	Emergencies	H.K	2011

**M:** male

**F:** female

**H. K:** House Keeper

A doctor, three nurses and six women's household; four men and seven women, whose average age is  $43 \pm 03$  years,

Three cases (03) have been discovered following an AES; and eight cases (09) due to viral hepatitis screening

### **Patient History**

All were engaged in services to high risk; three officers in the maternity ward, an officer in the service of resuscitation, and three other service emergencies and others worked respectively in the hemodialysis services, radiology, de and Stomatology the last two worked as agent incineration history professionals, currently race officer in the administration for 03 years.

The doctor took care of her mother who had hepatitis C for many years; the cleaning lady who worked in radiology was followed at the service of pneumo-ptisiologie for severe asthma and she was put under treatment with corticosteroids. The second cleaning lady who was working in the Emergency Department had undergone surgery for ovarian cyst; Stomatology Medic treated for chronic renal failure and was undergoing hemodialysis sessions.

Par ailleurs les autres patients n'avaient pas d'antécédents particuliers

### **The Discovery of the Hepatitis C**

Routine screening in 80%, and in 20% of cases, following a prescription serological post accident exposing blood (patients came reported their compensation at the level of the occupational medicine service).

### **The Clinical Symptoms**

It has no features for most of the patients except the two women from households with history of asthma and ovarian cyst, the nurse who had chronic renal failure who complained of fatigue with a sub-ictère.

### **Biological Assessments**

Requested for all patients (transaminases and bilirubin) who were repeatedly increased in the doctor and the housekeeper of the Radiology Department and the nurse of Stomatology, while other patient's transaminase remained fluctuated.

The serological results requested 03 months then 06 months returned positive.

The Polymerase Chain Reaction PCR was requested for all patients with the Pasteur Institute: she came back positive in 55% and negative in 45% of cases.

### **Radiological (Ultrasonography and Scanner)**

Were performed for all patients and found no particularities for all patients except for the housekeeper of the Radiology Department, a hepatic Angioma of the segment IV of 50 / 30mm was discovered incidentally.

Of course, all these patients have benefited of medical, biological, serological and radiological surveillance with the service of Medicine of the work of CHU Tlemcen and an Interferon of Ribavirin treatment was prescribed and established (patients treated with the level of service of Gastroenterology of the Tlemcen CHU).

### **Clinical Biological and Serological Evolution after TRT**

Two patients were unable to complete processing, history of asthma and ovarian cyst; another patient complained of major fatigue, with appearance of an HTA; the hepatic workup remains disrupted for two patients, while it is standard for the rest of the agents; the radiological assessment remained stationary for all patients.

PCR came back negative to 66% after treatment with interferon

### **DISCUSSIONS OF CASES**

Our door on 16 cases of hepatitis C reported whose study 12 out of 16 cases were confirmed by serological tests from the Pasteur Institute and who have proved to be positive.

All these officers exercise in services to high risk

PCR requested from the Pasteur Institute for all cases of hepatitis C to made, returned positive for 07 cases and negative with Ac anti **HCV** positive six months after 05 case

Clinical symptomatology has no special features except for two women in household and the resuscitation of Radiology who complain respectively fatigue and a sub-ictère.

Biological results showed fluctuations of the transaminases for most of the cases except for the doctor and the housekeeper (Radiology) remaining very increased rates.

Serological assessment (anti-HCV antibodies) repeatedly asked remains

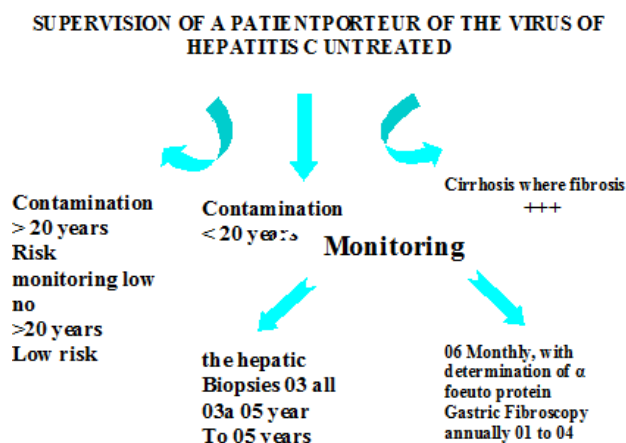
### **Positive**

Radiological examinations (ultrasound and scan) remain without special conditions for all patients except in a case where there is a hepatic Angioma

Moreover clinical, biological, serological and radiological evolution remains stable.

All agents with a positive PCR have benefited from treatment with Interferon + Ribavirin; the others are under medical and biological monitoring.

PCR requested topics regularly came back negative, these patients have resumed their activity with a change of service for officers engaged in services to high risk, by strengthening the means of protection with surveillance over close to everything the cases of hepatitis C.



**Figure 1**

### General Prevention

Following accidental contamination and outside rinsing and disinfection

Careful with alcohol and iodophors, there is no specific measure to reduce the risk of transmission of HCV. Non-specific immunoglobulin is very likely to be ineffective. For reasons assecurologiques should test the patient 'source' suspicious and, in the event of positive serology to 0, 3 and 6 months with the employee. Some authors recommend even measure transaminases at 3 and 6 months because there are some cases of infection **HCV** seronegative [5].

For this we must fight against the infections to work safely; wear gloves when handling blood; often wash their hands; use bleach water for cleaning.

Application of good basic hygiene measures; adopt safer sexual practices.

As well as strict application of universal precautions and vaccination against hepatitis **B** [7].

### CONCLUSIONS

There is no vaccine against this form of viral hepatitis, which affects more than 170 million people worldwide, according to the world Organization of health (who) disease may progress to cirrhosis and liver cancer. In the absence of a vaccine against hepatitis C, there is no possibility of specific prevention; Hence the importance of standard precautionary measures to prevent blood-borne infections.

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